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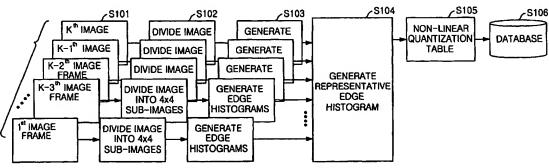
Published:

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(54) Title: NON-LINEAR QUANTIZATION AND SIMILARITY MATCHING METHODS FOR RETRIEVING VIDEO SEQUENCE HAVING A SET OF IMAGE FRAMES

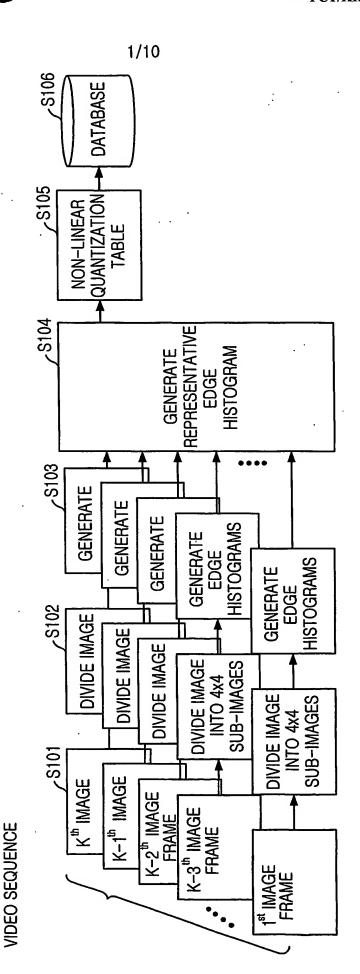
VIDEO SEQUENCE



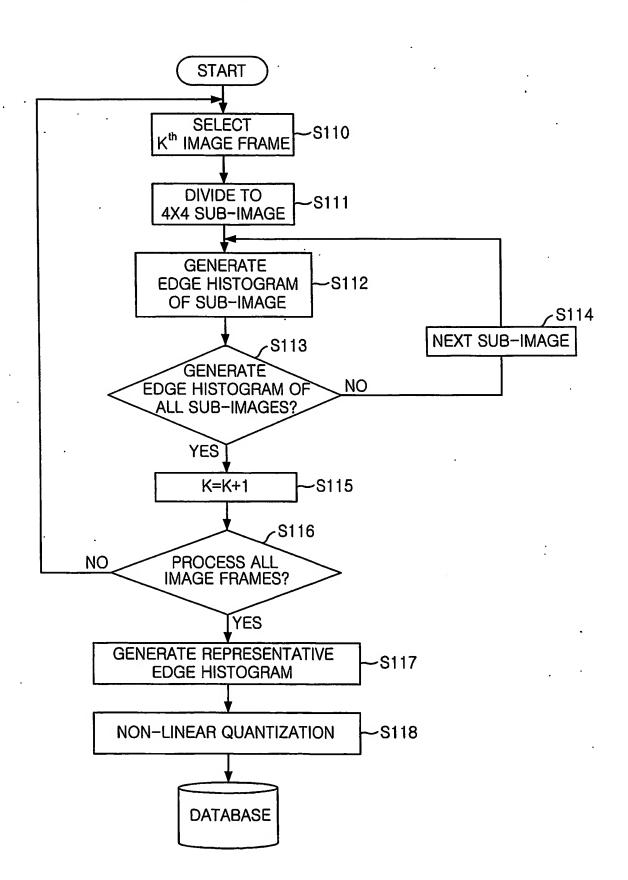
(57) Abstract: A method for constructing a database having digital video data information representing a plurality of video sequence is disclosed. The method includes the steps of: a) partitioning each image frame of each video sequence into L number of sub images; b) generating L number of edge histograms for each image frame; c) normalizing the edge histogram bins to thereby generate M number of normalized edge histogram bins; d) calculating M representative edge histogram bins in order to generate L number of representative edge histograms based on the normalized edge histogram bins; and e) non-linearly quantizing the representative edge histogram bins to generate M number of quantization index values for the each representative edge histogram, to be stored in the database.



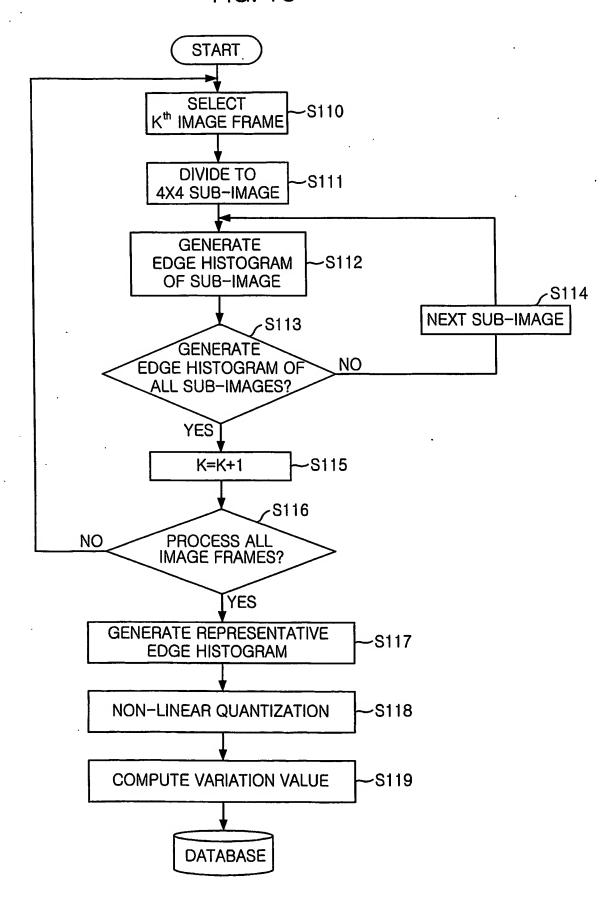
FIG. 1A



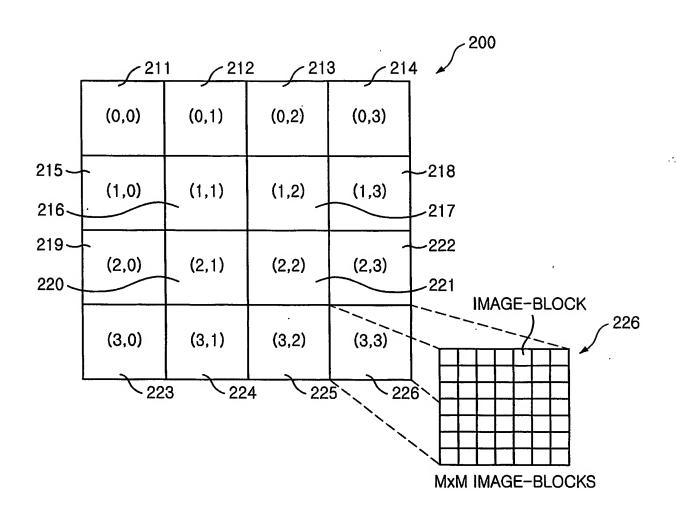
2/10 FIG. 1B



3/10 FIG. 1C



4/10 FIG. 2



5/10 FIG. 3A

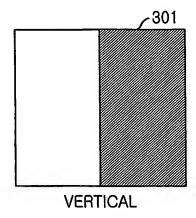


FIG. 3B

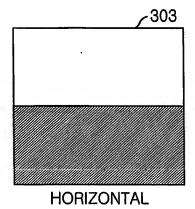
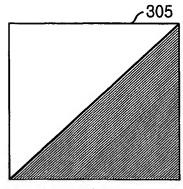


FIG. 3C



45-DEGREE

6/10 FIG. 3D

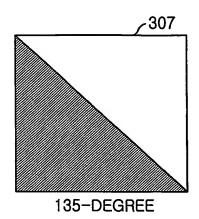
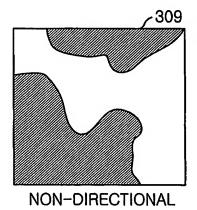


FIG. 3E



7/10 FIG. 4

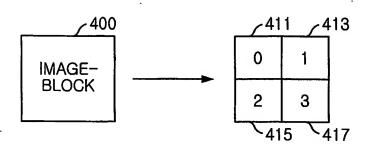


FIG. 5A

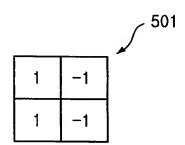
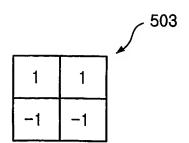


FIG. 5B



8/10 FIG. 5C

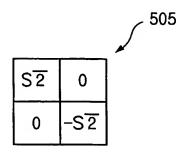


FIG. 5D

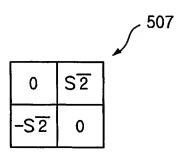


FIG. 5E

